WHAT IS CLAIMED IS:

- 1. An ink jet ink comprising:
- a) at least one first metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value > 0 and at 1.0 Status A visual density;
- b) at least one second metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value < 0 and at 1.0 Status A visual density; and
- c) at least one yellow azo-aniline yellow dye or metal complex yellow dye or mixtures thereof.
- 2. An ink jet ink according to claim 1 wherein the first metal complex black dye is C.-I. Reactive Black 31 or Pacified Reactive Black 31, the latter selected from among the following structures:

HOOC
$$N=N$$
 $N=N$ SO_2X SO_3H SO_3H

(I)

where X is -CH₂CH₂-O-H or -CH=CH₂, an alkylamino group or a substituted alkylamino group such as -CH₂CH₂N(CH₂CH₂-OH)₂, -CH₂CH₂NCH₃(CH₂CH₂-OH), -CH₂CH₂NCH₃(CH₂CH₂-SO₃Na), CH₂CH₂NCH₃(CH₂COONa), an alkylsulfo group or substituted alkylsulfo group, or mixtures thereof; or dimeric forms represented by structures II and III;

$$\begin{array}{c} \text{HOOC} \\ \text{N=N} \\ \text{SO}_3\text{H} \\ \text{SO}_3\text{H} \\ \end{array} \begin{array}{c} \text{SO}_3\text{H} \\ \text{N=N} \\ \text{N=N} \\ \end{array} \begin{array}{c} \text{SO}_3\text{H} \\ \text{N=N} \\ \text{HOOC} \\ \end{array}$$

HOOC
$$N=N$$
 $N=N$ N $N=N$ N $N=N$ N N N N N N N N N

or mixture of II and III; or mixtures in any proportion of I, II, or III.

- 3. An ink jet ink according to claim 2 wherein a chromium complex or cobalt complex black dye having an a* value of > 0 at 1.0 Status A visual density is combined in a mixture with structures I, II or III.
- 4. An ink jet ink according to claim 1 wherein the second metal complex black dyes is a metal complex bisazo black dye of the following structure:

where R₁ is unsubstituted or substituted phenyl or unsubstituted or substituted naphthyl; R₂ is H, alkyl, substituted alkyl, alkoxy, substituted alkoxy all with 1 to 18 C atoms, amino, substituted amino, halo, trifluoromethyl, carboxy, sulfo, carbamido, alkylcarbonylamino, arylcarbonylamino; or R₂ forms together with R₃ and the phenylene ring a 1,4-naphthylene moiety, which can be unsubstituted or substituted in position 6 or 7; R₄ is H, alkyl, substituted alkyl, all with 1 to 18 C atoms, cycloalkyl, unsubstituted or substituted heterocyclic alkyl, unsubstituted or substituted aralkyl, saturated or unsaturated aza and/or oxa and/or hetercyclic radicals; M is hydrogen, a metal cation, preferentially an alkali metal cation, an ammonium cation, or an ammonium cation substituted with alkyl, alkoxyalkyl or hydroxyalkyl radicals each having 1 to 12 C atoms; and Met is Cu, Ni, or Zn; or a trisazo metal complex black dyes of the following structure:

$$R_1$$
 $N=N$
 $X-O-Met_2$
 $N=N$
 $N=N$
 R_4
 R_5
 $N=N$
 R_6
 $N=N$
 R_6

where Met₂ is a metal atom, preferably Al, Co, Cr, Cu, Fe, or Ni; R₁ is a phenyl or naphthalene radical substituted by 1, 2 or 3 substituents selected from the group consisting of OH, O(C1-C6)-alkyl, COOM, SO₃M and NH₂; R₂ is C1-C6 alkyl, n

is 0 or 1, X is a chemical bond or -CO- or -SO₂-; R₃ is H, methyl or O(C1-C6) alkyl; R₄ and R₅ are each H, COOM or SO₃M; R₆ is a phenyl, pyridyl or pyrazole radical substituted by 1,2 or 3 substituents selected from the group consisting of OH, O(C1-C6) alkyl, COOM, SO₃M, NH₂, NHaryl, NHacyl and phenlysulfo; and M is ammonium, H, K, Li, or Na.

- 5. An ink jet ink according to claim 4 wherein a chromium complex or cobalt complex black dye having an a* value of < 0 at 1.0 Status A visual density is combined in a mixture with structures IV or V.
- 6. An ink jet ink according to claim 1 wherein the yellow dye is an azoaniline yellow dye or metal complex yellow dye or mixtures thereof.
- 7. An ink jet ink according to claim 6 wherein the yellow dye(s) are selected from the group consisting of C. I. Direct Yellow 86, C. I. Direct Yellow 107, C. I. Direct Yellow 132, C. I. Direct Yellow 173, C. I. Acid Yellow 99 and C. I. Acid Yellow 114 or mixtures thereof.
- 8. An ink jet ink according to claim 1 wherein the total amount of dyes in the ink composition is from 0.1 wt.% to 15.0 wt.%.
- 9. An ink jet ink according to claim 8 wherein the total amount of dyes in the ink composition is from 0.4 wt.% to 6.0 wt.%.
- 10. An ink jet ink according to claim 1 wherein the ratio of the first metal complex black dye(s) to second metal complex black dye(s) in the ink composition is from 1:19 to 19:1.
- 11. An ink jet ink according to claim 10 wherein the ratio of the first metal complex black dye(s) to second metal complex black dye(s) in the ink composition is more preferably from 1:9 to 9:1.

- 12. An ink jet ink according to claim 1 wherein the ratio of yellow dye(s) to the sum of the black dyes in the ink composition is from 1:3 to 1:99.
- 13. An ink jet ink according to claim 12 wherein the ratio of yellow dye(s) to the sum of the black dyes in the ink composition is more preferably from 1:19 to 1:5.
 - 14. An ink jet ink set comprising:
 - a) a cyan ink comprising a cyan dye and a carrier,
 - b) a magenta ink comprising a magenta dye and a carrier,
 - c) a yellow ink comprising a yellow dye and a carrier,
 - d) a black ink comprising a carrier; and,
- i) at least one first metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value > 0 and at 1.0
 Status A visual density
- ii) at least one second metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value < 0 and at 1.0
 Status A visual density; and
- iii) at least one yellow azo-aniline yellow dye or metal complex yellow dye or mixtures thereof.
- 15. An ink jet ink set according to claim 14 wherein the cyan ink comprises a sulfonated copper phthalocyanine cyan dye or mixture thereof.
- 16. An ink jet ink set according to claim 15 wherein the cyan dye is C. I. Direct Blue 86, C. I. Direct Blue 307.
- 17. An ink jet ink set according to claim 14 wherein the magenta ink comprises a metal complex magenta dye or anthrapyridone magenta dye or azo-naphthol derivitive magenta dye or mixtures thereof.

- 18. An ink jet ink set according to claim 17 wherein the magenta ink is Kodak Light Fast Magenta 1 (CAS # 251959-65-6), C. I. Reactive Red 23, pacified C. I. Reactive Red 23, C. I. Reactive Red 31, pacified C. I. Reactive Red 31, Ilford Magenta 377 (CAS # 182061-89-8), Nippon Kayaku JPD EK-1 (CAS # 224628-70-0), Acid Red 80, Acid Red 82, CAS# 212080-60-9 or mixtures thereof.
- 19. An ink jet ink set according to claim 14 wherein the yellow ink comprises C.I. Direct Yellow 86, C.I. Direct Yellow 107, C. I. Direct Yellow 132, C.I. Direct Yellow 173, C.I. Acid Yellow 99 or C. I. Acid Yellow 114 or mixtures thereof.
- 20. An ink jet ink set according to claim 14 which further comprises a light cyan ink and a light magenta ink.
- 21. An ink jet ink set according to claim 20 which further comprises a light yellow ink and or a gray ink.
 - 22. An ink jet printing method, comprising the steps of:
- A) providing an ink jet printer that is responsive to digital data signals;
- B) loading said printer with an ink jet recording element comprising a support having thereon an image-receiving layer;
 - C) loading said printer with an ink jet ink comprising:
- a) at least one first metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value > 0 and at 1.0 Status A visual density;
- b) at least one second metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value < 0 and at 1.0 Status A visual density; and

- c) at least one yellow azo-aniline yellow dye or metal complex yellow dye or mixtures thereof; and
- D) printing on said image-receiving layer using said ink jet ink in response to said digital data signals.
 - 23. An ink jet printing method, comprising the steps of:
- A) providing an ink jet printer that is responsive to digital data signals;
- B) loading said printer with an ink jet recording element comprising a support having thereon an image-receiving layer;
 - C) loading said printer with an ink jet ink set comprising:
 - a) a cyan ink comprising a cyan dye and a carrier,
 - b) a magenta ink comprising a magenta dye and a carrier,
 - c) a yellow ink comprising a yellow dye and a carrier,
 - d) a black ink comprising a carrier; and,
- i) at least one first metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value > 0 and at 1.0
 Status A visual density,
- ii) at least one second metal complex black dye that when printed alone on a receiving element gives a CIELAB a* value < 0 and at 1.0
 Status A visual density; and
- iii) at least one yellow azo-aniline yellow dye or metal complex yellow dye or mixtures thereof; and
- D) printing on said image-receiving layer using said ink jet ink in response to said digital data signals.